

ABSTRACT OF THE DISCLOSURE

1 A cathode for an electron tube and a method of preparing the same are provided. The
2 cathode includes a base metal and an electron emissive material layer attached to the base metal.
3 A surface roughness, which is measured from the distance between a highest point and a lowest
4 point of the surface of the electron emissive material layer, is controlled to be no greater than 8 μm .
5 By controlling the sizes of particles and pores constituting the electron emissive material layer to
be uniform and controlling the density and porosity of the electron emissive material layer, the
cathode is improved in compactness and surface evenness compared to a cathode prepared according
to a spraying method. Accordingly, shrinking of the cathode during operation can be prevented, and
the distance between the cathode and a G1 (first grid) electrode can be maintained uniform, so that
the life of the cathode can be greatly extended, and a stable electron emission characteristic can be
realized.